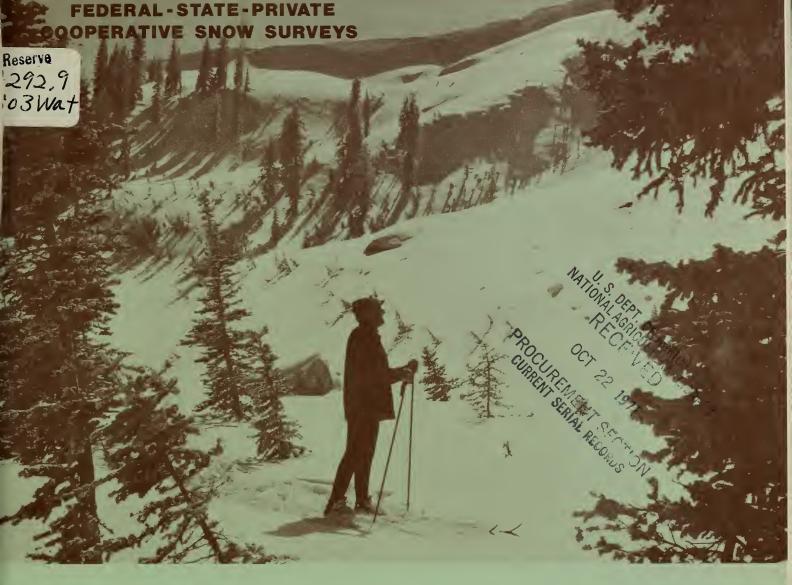
Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.





WATER SUPPLY OUTLOOK FOR IDAHO

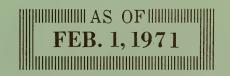
Prepared by

U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

IDAHO STATE DEPARTMENT OF WATER ADMINISTRATION

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.



TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbis Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters of key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Sail Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	12417 Federal Building, Denver, Colorado 80202
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 970, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

WATER SUPPLY OUTLOOK FOR IDAHO

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

KENNETH E. GRANT

ADMINISTRATOR SOIL CONSERVATION SERVICE WASHINGTON, D C

Released by

GUY W. NUTT

STATE CONSERVATIONIST SOIL CONSERVATION SERVICE BOISE, IDAHO

In Cooperation with

R. KEITH HIGGINSON

DIRECTOR
DEPARTMENT OF WATER ADMINISTRATION

Report prepared by

MORLAN W. NELSON, Snow Survey Supervisor and

J. ALDEN WILSON, Assistant Snow Survey Supervisor

SOIL CONSERVATION SERVICE SNOW SURVEY SECTION ROOM 345, 304 N. 8th. ST. BOISE, IDAHO 83702



WATER SUPPLY OUTLOOK for IDAHO







GENERAL SUMMARY FOR FEBRUARY 1, 1971

Snowfall during the month of January continued well above normal but not at the record-breaking pace earlier in the winter. On the major rivers in Idaho, snow cover now varies from 104% of normal on the Kootenai River to 220% on the Big Lost River. The water supply outlook for the entire state is excellent.

Precipitation at the valley elevations was also above normal and during several storms, rain fell on the snowpack as high as 10,000 feet. This rainfall on the snow and the relatively warm temperatures that occurred for as long as a week, resulted in unusually dense snow for this time of year. The snowpack, generally speaking, is more than 30% water at this time.

Streamflow during the month was unusually high on all rivers and streams, and many low elevation areas flooded as a result of frozen soil which did not absorb the melting snow or rain. At the valley and foothill elevations, there are many small streams that pose potential flood threats as a result of frozen soil beneath the snowpack and unusually heavy snow cover.

During the warm rainy period of January, a great portion of the valley elevation snow cover melted, but there are many rivers which still pose the threat of flooding if chinook winds or warm rains occur instead of normal melting.

The BOISE FRONT still has unusually heavy snow cover in the upper half of the watershed. Soils are saturated beneath the snowpack and all of the Boise Front will react swiftly to any drastic change in the weather. A heavy volume of water is contained in the snowpack, but unless unusually warm or rainy conditions occur in the next six weeks, no problem should develop.

On the WILLOW-SAND CREEK drainages above Idaho Falls, there is still a heavy snowpack with frozen soil and a potential threat.

The PORTNEUF RIVER, particularly in the upper portions above Bancroft, represents a critical area for this spring. There is an extremely heavy snowpack with frozen soils which represents a high probability of problems. Almost ideal melting conditions will have to occur to eliminate this flood threat.

The MALAD RIVER, MARSH CREEK, and MONTPELIER CREEK in eastern Idaho all have unusually heavy snowpacks which will result in high water this spring. Special plans should be considered in these areas for handling unusually high water, if it should occur as a result of adverse weather combinations.

The CAMAS-BEAVER CREEK area near Kilgore and the LITTLE WOOD RIVER also have an extremely heavy snowpack extending down to low elevations.

Plans for considering the problem of high water should be made in these areas and many others throughout the state which have the same combination of heavy snow cover and frozen soils beneath.

Unusually high inflows are expected for all of the irrigation reservoirs in southern Idaho.

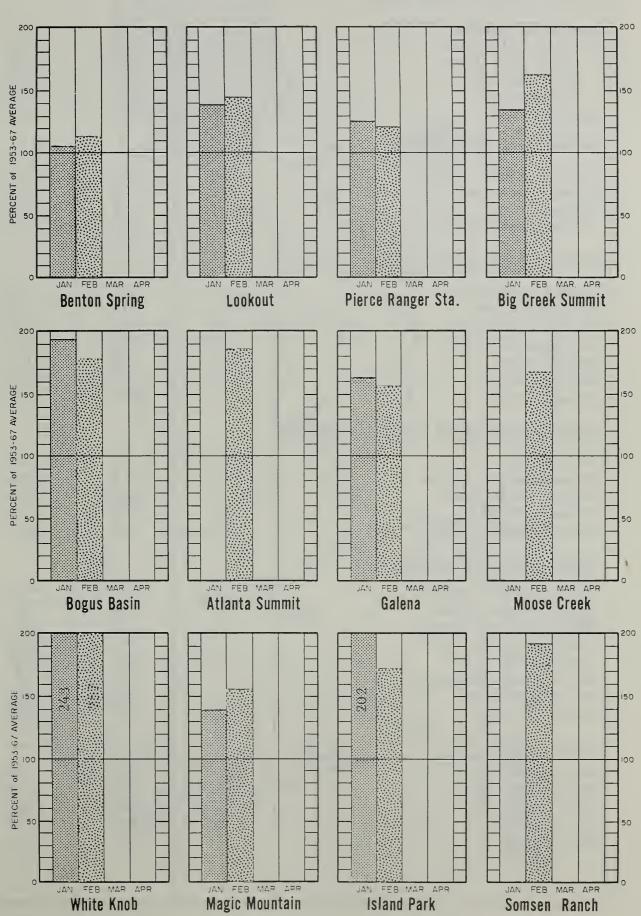
Streamflow forecasts vary from 105% of normal on the Kootenai River to 175% for inflow to Magic Reservoir.

Special measurements will be made during February in the valley and foothill areas to evaluate the changes in high flow potential that may result from weather conditions during February.

SNOW WATER DEPTHS ACCUMULATION For Selected Snow Courses

As Compared To 1953-67 15 Yr. Average

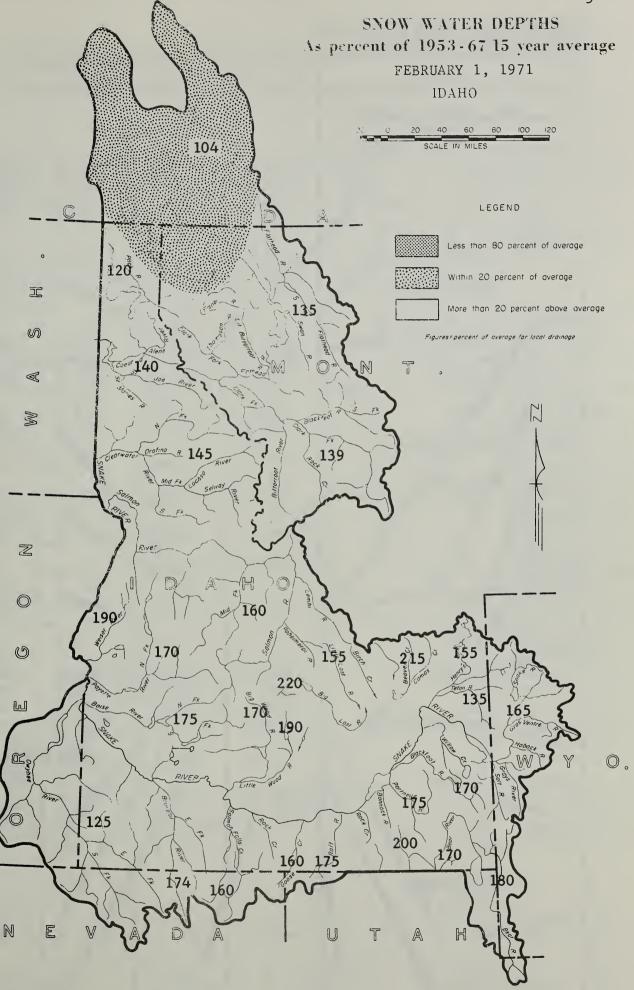
February 1, 1971



COMPARISON of SNOW COVER

RIVER BASIN WATERSHED	NO.OF COURSES AVERAGED		SPERCENT OF : 1953-67 AVERAGE	
UPPER COLUMBIA RIVER BASIN				
Kootenai River Pend Oreille River Clark Fork River Flathead River Priest River Spokane River	8 18 15 3 2-4 3	170 158 152 185 140 140	104 138 139 135 120 140	
LOWER SNAKE RIVER BASIN				
Palouse River Clearwater River Salmon River Lemhi River	5 7-29 10-19 7	100 145 140 135	100 145 160	
MIDDLE SNAKE RIVER BASIN - Northside Little Lost River Big Lost River Little Wood River Big Wood River Boise River Payette River Weiser River	5 3-5 3-4 6 9 8	185 235 210 150 130 115 140	155 220 190 170 175 170	
MIDDLE SNAKE RIVER BASIN - Southside Raft River Goose-Trapper Creeks Salmon Falls Creek Bruneau River Owyhee River - Idaho	2 2 9 4 12-14	95 85 115 110 75	175 160 160 174 125	
UPPER SNAKE RIVER BASIN Upper Snake - Wyoming Camas-Beaver Creeks Medicine Lodge Creek Henrys Fork River Teton River Willow-Sand Creeks Blackfoot River Portneuf River	22 2 2 10-12 2-3 7 4 3-8	140 170 210 145 100 115 125 155	165 215 210 155 135 170 175	
GREAT BASIN Bear River Montpelier Creek Mink Creek Cub River Malad River	12 4-6 4-7 2 2-6	160 155 165 160 135	180 180 180 170 200	



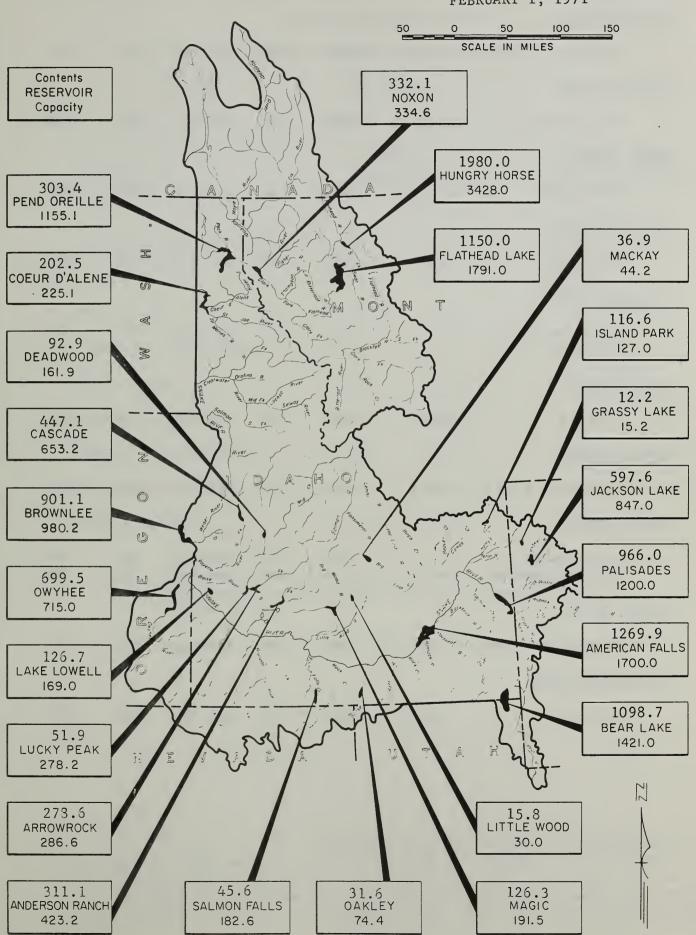


RESERVOIR STORAGE (1,000 Ac. Ft.)

		MEASURED (First of Month)				
RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	1953-67 AVERAGE		
UPPER COLUMBIA BASIN						
Clark Fork - Pend Oreille						
Hungry Horse	3428.0	1980.0	2026.0	2474.0*		
Flathead	1791.0	1150.0	1067.0	1186.0		
Pend Oreille	1155.1	303.4	152.4	510.0		
Noxon	334.6	332.1	320.0	320.2*		
Spokane						
Coeur d'Alene	225.1	202.5	161.1	123.4		
SNAKE BASIN						
Snake						
Jackson Lake	847.0	597.6	624.1	440.2		
Palisades	1200.0	966.0	872.5	673.2*		
American Falls	1700.0	1269.9	1242.8	1241.1		
Island Park	127.0	116.6	122.8	97.5		
Grassy Lake	15.2	12.2	8.4	10.5		
Brownlee	980.2	901.1	912.1	539.8*		
Goose-Trapper Creeks	7//	21.6	16.0	10 5		
Oakley Salmon Falls Creek	74.4	31.6	16.8	13.5		
Salmon Falls	182.6	45.6	29.3	22.7		
Big Lost						
Mackay Big Wood	44.2	36.9	31.4	28.9		
Magic	191.5	126.3	121.4	91.5		
Little Wood						
Little Wood	30.0	15.8	18.7	10.5*		
Fish Creek						
Carey Valley	14.4	7.3	8.2			
Boise						
Anderson Ranch	423.2	311.1	304.6	227.0		
Arrowrock	286:6	278.6	265.6	227.7		
Lucky Peak	278.2	51.9	79.2	108.5*		
Lake Lowell (Deer Flat)	169.0	126.7	145.2	101.1		
Owyhee Owyhee	715.0	699.5	6.08.0	359.3		
Payette	/13.0	099.3	0.00.0	339.3		
Cascade	653.2	447.1	294.1	276.9		
Deadwood	161.9	92.9	79.7	69.1		
Weiser						
Mann Creek	11.1	8.1	9.4			
GREAT BASIN						
Bear						
Bear Lake	1421.0	1098.7	1121.0	854.0		
* Period of Record.						

USABLE CONTENTS (1,000 Acre Feet)

FEBRUARY 1, 1971



STREAMFLOW FORECASTS			THIS YEAR	Y	PAST F	RECORD
OTREASE TORESTO		FORE	CAST	FORECAST	THOUSAND A	
BASIN, STREAM and/or FORECAST PO	INT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average +
KOOTENAI RIVER						
Leonia	(at)	9650	105	Apr-Sep	6255	9198
SPOKANE RIVER						
Post Falls $\underline{1}/$	(at)	3500	111	Apr-Sep	2839	3140
SNAKE RIVER			10/		1050	27/2
Heise 2/	(nr)	5000	134	Apr-Sep	4050	3743
BIG LOST RIVER						
Mackay <u>3</u> /	(nr)	210	125	Apr-Sep	203	168
BIG WOOD RIVER						
Magic Reservoir Inflow		470	175	Apr-Sep	248	268
BOISE RIVER						
Boise <u>4</u> /	(nr)	2400	154	Apr-Sep	1658	1556
PAYETTE RIVER						
Horseshoe Bend <u>5</u> /	(nr)	2700	147	Apr-Sep	2066	1839
OWYHEE RIVER						
Lake Owyhee net inflow <u>6</u> /		455 326	104 109	Feb -Jul Apr-Sep	420 307	438 300
SALMON RIVER						
Whitebird	(at)	8900	130	Apr-Sep	7378	6850
CLEARWATER RIVER						
Spalding	(at)	11000	128	Apr-Sep	7982	8578

⁽c) Assuming normal meteorological conditions.

^{1/} Observed flow corrected for storage in Coeur d'Alene Lake. 2/ Corrected for storage in Jackson Lake and Palisades. 3/ Observed flow corrected for storage in Mackay Reservoir. 4/ Corrected for storage in Arrowrock, Anderson Ranch and Lucky Peak. 5/ Corrected for storage in Cascade and Deadwood Reservoirs. 6/ U.S.B.R. records of inflow.

VALLEY PRECIPITATION $\underline{1}/$ Division Averages and Departures

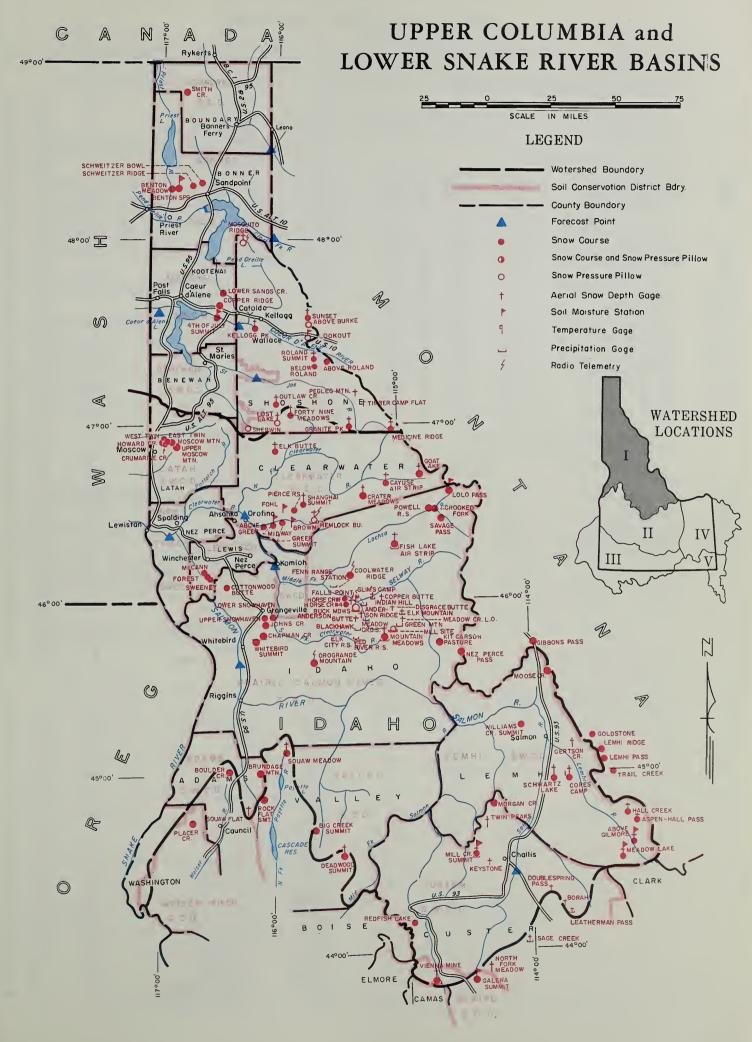
In Inches

		Fall - Winter				
		Nov. 70 - Jan. 71				
Observed	Departure <u>2/</u>	Ubserved	Departure 2/			
5.43	+1.84	11.74	+1.82			
4.05	+1.62	9.09	+2.24			
4.05	11.02	7.07	12.27			
1.76	+0.66	3.33	+0.27			
5.83	+1.43	13.69	+1.22			
3.44	+1.09	9.72	+3.27			
1.51	+0.56	4.79	+1.96			
4.06	+1.23	12.20	+4.66			
4.58	+1.38	10.08	+1.09			
		20700				
1.52	+0.30	5.51	+2.08			
	Janu Observed 5.43 4.05 1.76 5.83 3.44 1.51 4.06 4.58	4.05 +1.62 1.76 +0.66 5.83 +1.43 3.44 +1.09 1.51 +0.56 4.06 +1.23 4.58 +1.38	January 1971 Nov. 7 Observed 5.43 +1.84 11.74 4.05 +1.62 9.09 1.76 +0.66 3.33 5.83 +1.43 13.69 3.44 +1.09 9.72 1.51 +0.56 4.79 4.06 +1.23 12.20 4.58 +1.38 10.08			

^{1/} Preliminary analysis by U. S. Weather Bureau from data furnished by Meterological Service of Canada and U. S. Weather Bureau.

^{2/} Departure from 15-year (1953-67) drainage division average.





INDEX to SNOW COURSES

NO	. STATE NAME	SEC.	TWP. RGE	_		NO. STA	TE NAME		SEC.	TWP.	RGE.	ELEV.
	UPPER COLUME	OIN DAG	TAT				CLEARW	/A TED DIVED				
	OTTER COLUMI	DIA DA	211/			16C11 I		ATER RIVER	14	35N	2 E	1240
	KOOTENAI RIVER					15D7a I	Anderson	Butte	34	30N	9 E	6800
16AL	I Smith Creek	29	64N 3	W 4800		15D8a I 15D9p I		-	35 31	30N 29N	9E 10E	5400 6080
			544.5	4000		16C14m I	Brown		11	35N	3E	3100
	PEND OREILLE - PRIE					15D5MAP I 15C3A I			26 4	31N 38N	8E 11E	5600 3700
16A2 16A3M	I Benton Meadow I Benton Spring	27 30		W 2344 W 4900		15C7R I 15D10a I		Mountain	32 35	33N 31N	8E 10E	6200 6000
16A6	I Schweitzer Bowl	20	58N 2	W 4500		16C16 I	• •		33	32N	1W	5140
16A5	I Schweitzer Ridge	19	58N 2	W 6100		15C9A I			2	37 '	9E	6100
	SPOKANE RIVER					14C10 I			27 26	37N 30N	14E 10E	3800 6600
15B8S	I Above Burke	11	48N 5	E 4100		16C15A I	Elk Butte	•	6	40N	3E	5550
15B7 15B6	I Above Roland I Below Roland	35 34		E 4350 E 3770		15D12p I 15D13ap I		Rgr. Sta.	23 34	29N 30N	8E 11E	4000 6900
16B2	I Copper Ridge	6 & 7	47N 6 50N 1			15C11a I		int ger Station	10	31N	9E 7E	4600 1580
16B3M 15B13A	I Fourth of July Summit I Granite Peak	6	49N 1 42N 8			15C12p 1		e Airstrip	23 35	32N 35N	11E	5000
16B5A	I Kellogg Peak	19	48N 3	E 5560		15C8m 1			16 1	36N 32N	5E 3W	3450 4550
15B2MS 16B1	I Lookout I Lower Sands Creek	4 32	47N 6			15B3A I	Forty-nir	ne Meadows	6	43N	5E	5000
15B4A	I Medicine Ridge	24	43N 10	E 6150		14C9A I 15D14p I			4 15	38N 28N	13E 11E	6600 7000
16A4AS 15B12A	I Mosquito Ridge I Outlaw Creek	5 19	54N 2 44N 5			16C13	Greer Sum	mmit	13	35N	2E	3000
15B15a	I Pegleg Mountain	15	44N 9	E 5735		15C6APR I 15C8s M			7 17	36N 14N	7E 27W	5500 6000
15B5A 16C1S	I Roland Summit I Sherwin	26 28 & 33	47N 6: 42N 1:			15C1 M	i Hoodoo Ci	reek	16	14N	27W	5900
15B9A	I Sunset	28	49N 5	E 5600		15C14 I			25 5	31N 30N	8E 9E	5500 5400
15B16a	I Timber Camp Flat	23	44N 9	E 4300		15D21a I			4	30N	9E	5700
	LOWER SNAKE	DACINI				15D22ap I 14D3 I		ill on Pasture	30 4	31N 27N	10E 16E	6100 5020
	LOWER SNAKE	MIGAG				14C5M I	Lolo Pass	5	16	38N	15E	5230
	PALOUSE RIVER					15B14AS I 15D15p I		e rse Creek	16 28	43N 31N	4E 9E	6000 4100
						16D7 I	Lower Sno		9	29N	3E	5250
1606	I Crumarine Creek	24	40N 5			16C8 I		reek Guard Station	25 5	33N 29N	3W 10E	4300
16C3 16C5	I East Twin I Howard Creek	13 14		W 4050 W 3450		15D17a I	Meadow Cr	reek Lookout	25	29N	11E	7000
16 C2 16 C7 SR	I Moscow Mountain I Upper Moscow Mountain	18 16		W 4400 W 4600	1	16 C12M I 15 D18 ps I		e	14 22	35N 28N	2E 11E	2200 6700
16C/SK 16C4P	I Upper Moscow Mountain I West Twin	14		W 4600 W 4250		15D6AP I			9	27N	10E	6300
						14D1 M 15D4R I		e rass e Mountain	25 24	1S 27N	24W 6E	6575 7800
						15C5 I		anger Station	2	36N	5E	3170
						14C6 I 15D19p I		anger Station r Ranger Station	3 3 4	37N 27N	14E 9E	4230 4340
						15D2Oa I 14C4 I			14 18	29N 36N	10E 15E	6000 6600
	LEGEND					15C4A I			7	37N	6E	4600
						15C13p I 16C10 I		amp	11 1	31N 32N	9E 3W	1850 4435
	Numbering System (examp	le)				16D4 I	•	owhaven	8 & 9		i 3E	5600
10J7	SNOW COURSE ONLY.											
10J7P 10J7M	SNOW COURSE AND PRECIPITATION GA SNOW COURSE AND SOIL MOISTURE STA						SALMO	N RIVER				
10J7A	SNOW COURSE AND AERIAL MARKER.					13E19MA I	Above Gi	lmore	13	13N	26E	8200
10J7s	PRESSURE PILLOW ONLY.					13E21A I	Aspen-Ha	11 Pass	6 24	16N 15N	28E 5E	8110 6600
10J7S	SNOW COURSE AND PRESSURE PILLOW.					15E2 I 13E8a I		K SUMMIT	21	10N	23E	8250
10J7MA	SNOW COURSE, SOIL MOISTURE STATIO					16D6 I	-	Mountain	6 16	19N 29N	3E 2E	7560 4215
10J7MP	SNOW COURSE, SOIL MOISTURE STATIO	N AND PRECIPITA	ATION GAGE.			16D2 I 13E17A I	Copes Car	mp	36	18N	22E	7500
10J7m 10J7a	SOIL MOISTURE STATION ONLY.					13E25a I 13D17a I	Doublesp	ring Pass	3 22	10 N 2 2 N	22E 23E	8400 8050
10J7a 10J7p	AERIAL MARKER ONLY. STORAGE PRECIPITATION GAGE ONLY					13D2 M			4	28	19W	7100
						13D9 N 13E2OA J			11 1	8S 16N	16W 27E	8100 7560
						16D3 1			9	29N	2E	3805
						14E6a I 13E24ap I	•		15 20	13N 9N	18E 23E	7700 9800
						13E1 M	i Lemhi Pa	ss	9	10 S	15W	7480
						13E23 M 13E18MA I			4 24	10 S 13 N		8100 9100
						14E1MAP I	Mill Cree	ek Summit	8	13N	17E	8870
						13D16 I 14E4 I			22 & 26 32		21E	6200 7580
						14E2 I	Redfish I	Lake	3	9N	13E	6600
						13E16A I			34 15	18N 10S		8500 7090
						14E3a I	Twin Peal	ks	.78	15N	17E	10300
						14F4AP I 16D5 I			32 17	6N 29N	14E 2E	8900 4390
						14D4 I		Creek Summit	34	21N	20E	7800
												_

UPPER COLUMBIA RIVER BASIN

PEND OREILLE - PRIEST RIVER										
Benton Meadow Benton Spring #Mosquito Ridge (SP) Schweitzer Bowl Schweitzer Ridge	16A2 16A3 16A4 16A6 16A5	2344 4900 5100 4500 6100	1/28 1/27 2/1 1/28 1/28	20 49 80 109	7.1 15.8 27.0 28.3 39.7	8.3 11.2 17.7 21.0 23.7	5.1 14.0 			
SPOKANE RIVER										
Above Burke (SP) Fourth of July Summit Lookout Mosquito Ridge (SP) Sherwin Sherwin (SP)	15B8 16B3 15B2 16A4 16C1 16C1	4100 3100 5250 5110 3200 3200	2/1 1/28 1/28 2/1 2/1 2/1	34 109 35 	15.5 10.0 36.1 27.0 11.5	7.5 24.4 17.7 9.3 9.0	6.4* 25.0 10.4*			
	Ţ	OWER SN	AKE RIV	ER BASI	<u>1</u>					
PALOUSE RIVER										
Crumarine Creek East Twin Howard Creek Moscow Mountain West Twin	16C6 16C3 16C5 16C2 16C4	3340 4050 3450 4400 4250	1/28 1/28 1/28 1/28 1/29	21 24 14 46 29	6.1 7.5 4.2 14.3 9.4	5.6 8.8 6.3 13.5 7.8	5.9* 10.5* 4.8* 12.2* 8.4*			
CLEARWATER RIVER										
Above Greer Buck Meadows Cayuse Airstrip Coolwater Mtn. (SP) Cottonwood Butte Crater Meadows Crooked Fork Disgrace Butte (A) Elk Mountain Fish Lake Airstrip Forest Greer Summit Hemlock Butte Hemlock Butte (R) Hemlock Butte (SP) #Hoodoo Basin Mont. #Hoodoo Basin (SP)Mont.	15C10	6100 3800 6600 6900 5000 4550 3000 5500 5500 6000	1/26 2/1 2/1 1/29 1/27 2/1 1/29 2/1 2/1 1/28	126 46 60 103 132 23 0 156	37.8 14.2 19.8 37.3 43.5 6.7 0.0 47.0 53.1 51.8	8.0 17.2 27.2 27.0 3.2 T 28.8 34.6 33.5 33.1	7.6* 7.6* 25.1* 5.3* 34.2*			

ii							
SNOW			CU	RRENT INFOR	MATION	PAST RI	ECORD
DRAINAGE BASIN and SNOW	COURSE		DATE OF	SNOW DEPTH	WATER CONTENT	WATER CONT	
NAME	NO.	ELEVATION	SURVEY	(Inches)	(Inches)	LAST YEAR	AVERAGE 6
#Hoodoo Creek Mont.	15C1	5900	1/28	136	47.0	31.8	
Lolo Pass	14C5	5230	1/26	102	26.6	20.5	***
Lower Snowhaven	16D7	5250	1/28	51	15.0	12.3	
McCann	16C8	4300	1/27	23	7.1	1.5	5.1*
Meadow Cr. Lookout (A)		7000	2/1	78	25.0	17.2	
Midway	16C12	2200	2/1	0	0.0	T	
Mill Site	15D18	6700	2/1	77	24.6	17.0	
Mountain Meadows	15D6	6300	2/1	61	18.8	14.8	
Orogrande Mtn. (R)	15D4	7800	2/1		31.8	25.9	
Pierce Rgr. Sta.	15C5	31.70	1/29	33	10.2	4.8	8.5
Powell Rgr. Sta.	14C6	4230	1/26	44	13.4	8.2	
Savage Pass	14C4	6600	1/27	79	23.4	15.8	
Shanghai Summit	15C4	4600	1/29	72	23.0	16.2	
Sweeney	16C10	4435	1/27	16	5.2	1.8	5.0*
Upper Snowhaven	16D4	5600	1/28	54	16.0	13.8	
SALMON RIVER							
Big Creek Summit	15E2	6600	1/29	106	37.4	31.4	23.2
#Boulder Creek	16D1	5500	1/27	94	30.6	21.6	15.9*
Brundage Mountain	16D6	7560	1/28	142	47.8	42.6	
Chapman Creek	16D2	4215	1/28	14	4.1	0.6	2.8*
#Galena Summit	14F12	8795	1/28	83	25.3	16.4	15.3
#Gibbons Pass Mont.	13D2	7100	2/1	65	22.2	15.1	14.4
Johns Creek	16D3	3805	1/28	3	0.7	0.2	2.0*
Mill Creek Summit	14E1	8870	1/28	67	22.5	14.0	
Moose Creek	13D16	6200	1/29	61	18.2	13.8	10.9
Morgan Creek	14E4	7580	1/28	50	14.4	8.4	11.1*
#Rock Flat Summit	16E1	5200	1/28	67	21.6	14.9	11.7
Whitebird Summit	16D5	4390	1/28	28	7.5	1.7	4.8*
Lemhi River							
Above Gilmore	13E19	8200	1/27	32	8.9	6.4	
Aspen-Hall Pass	13E21		1/27	31	6.7	7.0	
Copes Camp	13E17	7500	1/26	30	7.4	4.1	
Gertson Creek	13D17	8050	2/1	30	9.0	7.0	
Hall Creek	13E20	7560	1/27	16	3.7	4.1	
Meadow Lake	13E18	9100	1/27	54	17.8	11.4	
Schwartz Lake	13E16	8500	1/26	41	11.6	7.6	

SOIL MOISTURE	PROFILE	(Inches)					
STATION NAME	ELEVATION	DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
SPOKANE RIVER							
Fourth of July Summit Lookout	3100 5250	48 48	11.6	1/28 1/28	10.4	10.2 7.5	10.2
CLEARWATER RIVER							
Brown Midway	3100 2200	36 36	6.7	2/1 2/1	6.5	5.9 5.2	5.6 5.1
SALMON RIVER							
Mill Creek Summit	8870	48	8.4	1/28	5.5	4.4	6.7
Lemhi River							
Above Gilmore Meadow Lake	8200 9100	60 48	5.4	1/27 1/27	2.8	2.4 1.9	4.3
	J		L				

MIDDLE SNAKE RIVER BASIN - NORTHSIDE LITTLE LOST RIVER 4.2 3.2* Fairview Guard Sta. 13E5 6750 1/27 22 5.8 1/27 4.0 3.0 Lost Garfield 6600 17 2.6% 13E3 1/27 10.0 5.8 Moonshine 13E6 7450 36 8.3* Sawmill Canyon 1/27 32 9.4 5.0 5.8* 13E4 6900 Wet Creek Summit 13E7 7600 1/28 46 14.0 5.2 7.8* BIG LOST RIVER Bear Canyon 13F3 7920 1/28 62 19.9 11.4 Copper Basin 7650 1/28 33 11.4 4.8 13F2 17.5 Dry Fork (A) 1/27 57 - -13F20 7340 1/26 56 17.2 Iron Bog 13F11 7650 7.6 8.0* Leadbelt 1/26 37 11.8 3.9 6.2* 13F12 6800 White Knob 13F1 7700 1/28 13.1 3.4 5.1* 38 FISH CREEK #Dry Fork (A) 13F20 7340 1/27 57 17.5 LITTLE WOOD RIVER #Bear Canyon 13F3 7920 1/28 62 19.9 11.4 5.4 Garfield Rgr. Sta. 1/29 43 13.5 7.0* 13F4 6554 Muldoon 6300 1/29 32 9.2 4.0 5.5* 13F5 Swede Peak 1/29 9.0 10.4* 13F9 7500 65 20.8 BIG WOOD RIVER #Couch Summit 14F10 6950 1/26 68 21.8 13.8 10.9* Galena 14F1 7300 1/27 68 20.8 15.6 13.3 Galena Summit 16.4 14F12 8795 1/28 83 25.3 15.3 15.6 9.4 9.3 Graham Ranch 14F5 6200 1/27 54 1/28 72 21.8 11.6 13.8 Mount Baldy 14F9 9000 Soldier Rgr. Sta. 6100 2/1 44 15.0 13.2 8.4* 14F11 CANYON CREEK 6650 1/27 54 18.2 Bennett Mountain 15F7 5.3 Dixie Hill 15F8 5230 1/27 17 BOISE RIVER 20.7* Atlanta Summit 15F4 7500 1/28 110 38.3 26.3 Bad Bear 15.2 12.4 9.9* 15F2 5500 2/1 47 #Bennett Mountain 1/27 54 18.2 15F7 6650 #Bogus Basin 6120 70 26.3 23.0 14.8 16F2 2/1

⁽b) 1953-67, 15 year period. * Not located directly on this drainage. * Estimated 1953-67, 15 year Average. (A) Aerial observation: Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.

MIDDLE SNAKE RIVER BASIN NORTHSIDE IDAHO 50 75 MILES SCALE A O N T LILEY BIG CREEK SUMMIT DEADWOOD SUMMIT LEMH, MOONSHINE DOUBLESPRING + PASS D A 0 FAIRVIEW GUARD STA H 9 CUSTER ARK c u SWALIGER I PAYETTE GEM DEADMAN GULCH MOORES CR Harseshoe RUTTE B U T T E JEFFERSON 06 PRAIRIE M O RAE 0 A D A RANCH DAM RANCH **OFairfield** arey S. C. D. B L A I N E HILL RES TOWNS BENNETT TOWNS DIVIDE BINGHAM Mountain Hame GOODING MERICAN FALLS RES. Ε MINIDOKA ROME CASSIA WATERSHED LOCATIONS LEGEND I Watershed Boundary Soil Conservation District Bdry. County Boundary Forecost Point II IV Snow Course IIISnow Course and Snow Pressure Pillow Snow Pressure Pillow Aeriol Snow Depth Gage Soil Moisture Stotion Temperature Goge Precipitation Goge Rodio Telemetry

INDEX to SNOW COURSES

NO.	STATE	: NAME	SEC.	TWP.	RGE.	ELEV.	NO. S	TATE	NAME	SEC.	TWP.	RGE.	ELEV.
			LAT.	AND _	LONG.					LAT.	AND	LONG	
	MID	DLE SNAKE RI	VER	BAS	TNI				BOISE RIVER				
•	MIII			DAS	11/		15F4APS	1	Atlanta Summit	23	5 N	10 E	7500
		NORTHSID	\mathbf{E}				15F2M	Ī	Bad Bear	35	7 N	6E	5500
		11010111101D					16F4	I	Bogus Basin Road	32	5N	3E	5360
		LITTLE LOST RIVER					16F5m	I	Bogus Basin Road	36	5 N	2 E	4830
		ETTTEL LOST KITCK					14F10A	I	Couch Summit	9	2N	14E	6950
13E5M	I	Fairview Guard Station	27	12N	26 E	6750	15F10a	Ι	Danskin	17	1N	7 E	5650
13E3	I	Lost-Garfield	3	11N	26 E	6600	16F1	I	Deadman Gulch	29	7 N	4E	5600
13E6	I		31	13N	26 E	7450	15E9AP	I	Jackson Peak	7	8N	9E	7000
13E4	I	Sawmill Canyon	17	12N	26E	6900	15F1MP	I	Moores Creek Summit	19	7 N	7 E	6100
13E9a	I		26	9N	24E	9050	15F6P 15F3A	I I	Prairie Road Creek	13	2N	7 E	4900
13E7M	AP I	Wet Creek Summit	15	8N	25E	7600	15F5APS	I	Trinity Mountain	5 7	5N 3N	8 E 9 E	5550 7780
		BIG LOST RIVER					15F11a	I	Willow Creek Cabin	26	1N		4710
		BIG LOSI KIVLK					151114	•		20	IN	OL	4710
13F18p		-	7	5N	23E	8800			CANYON CREEK				
13F3 13F13a	I I		26 7	5N 5N	21E 23E	7920 8 900	15F7	I	Bennett Mountain	7	28	9E	6650
13F13E	I		24	5N 6N	23E	7650	15F8	ī	Dixie Hill	13	25	8E	5230
13F19t		• •	25	7 N	22E	8550	15F12a	ī	Little Camas Flat	21	18	9E	4950
13F20a			23	3 N	23E	7340	15F13a	I	Long Tom	19	18	8 E	4550
13F8a	Ī	-	28	4N	22E	9350							
13F7a	I	Grasshopper	15	4N	22E	8400	1		PAYETTE RIVER				
13F11	I		23	4N	22E	7650							
13F12	I	Leadbelt	34	4 N	23E	6800	16F2MPS	I	Bogus Basin	16	5N	3E	6120
14F3A	I	Lost Wood Divide	19	6N	19E	7900	15 E8	Ι	Cozy Cove	19	11N	7E	5900
13F17a			14	6N	23E	8300	15E3	I		21	14N	4E	4800
14F15a			20	7N	18E	8150	15E10	I	Deadwood Airstrip	8	11N	7E	5440
14F6p	I		18	6 N	19E	7685	15E7 15E4A	I	Deadwood Dam Deadwood Summit	8 23	11N 14N	7 E 7 E	5290
14E5 ap		3	12 17	9N	20 E	7800	16 E7a	I	Greenfield Flat	1	13N	7 E 2 E	7000 7370
13F14a 14F2A	ap I I		9	4n 6n	22E 19E	8640 7500	16E4	ī	High Valley Summit	9	10 N	2 E	5170
13F1	Ī		25	7N	23E	7700	15E1	ĩ	Lake Fork	3	18N	4E	6000
	_						16E1	I	Rock Flat Summit	1	18N	2 E	5200
		BIG WOOD RIVER					15D1	I	Secesh Summit	34	22N	4E	6600
							16F7	I	Shafer Butte	15	5N	3 E	7480
15F9a	I		11	28	9E	5720	15E5A	I	Silver Creek Ridge	24	12N	5 E	5700
14F8AF	, I	Dollarhide Summit	16	3N	15 E	8620	15D2A	I	Squaw Meadow	5	21N	4E	5800
14F1M	I		3	6N	15E	7300	16 E3	I	Tripod Summit	17	11N	3E	5200
14F12M			33	7N	15E	8795			WEISER BIVER				
14F5	I		10	5N	17E	6200 7900			WEISER RIVER				
14F7 14F9	I	Mascot Mine Mount Baldy	8 26	4N 4N	20E 17E	9000	16D1P	I	Boulder Creek	15	20N	1W	5500
14F11	I	Soldier Ranger Station	19	2N	14E	6100	16E6a	I	Mica Ridge	15	15 N	2 E	6800
1-71 11	•	Soluter Manger Scatton	1)	-11	142	0100	16 E2	I	Placer Creek	15 & 16	17N	3W	6000
		LITTLE WOOD RIVER					16E5a	Ι	Squaw Flat	32	17N	2E	6230
13F4M	I	Garfield Ranger Station	11	3 N	21E	6554			MANN CREEK				
13F4M	I		25	3N	21E	6300	16E9	I	Mann Creek	29	15N	5W	5980
14F13m		Niggerhead	26	2N	20E	5450	16 E8	Ī	Sturgill Ridge	28	15N	5W	6680
14F14a			30	4N	20E	8350	17E1	I	Robinson Creek Ridge	2	14N	6W	6220
13F9A	I		4	3 N	21E	7500	17E2	I	Thorson Cabin	12	14N	6W	5320
		FISH CREEK											
13F10	1	Iron Mine Creek	32	3N	23E	6370							
13F6	I		12	2N	23E								

LEGEND

Numbering System (example)

10J7	SNOW COURSE ONLY.
10J7P	SNOW COURSE AND PRECIPITATION GAGE.
10J7M	SNOW COURSE AND SOIL MOISTURE STATION.
10J7A	SNOW COURSE AND AERIAL MARKER.
10J7s	PRESSURE PILLOW ONLY.
10J7S	SNOW COURSE AND PRESSURE PILLOW.
10J7MA	SNOW COURSE, SOIL MOISTURE STATION AND AERIAL MARKER.
10J7MP	SNOW COURSE, SOIL MOISTURE STATION AND PRECIPITATION GAGE.
10J7m	SOIL MOISTURE STATION ONLY.
10J7a	AERIAL MARKER ONLY.
10J7p	STORAGE PRECIPITATION GAGE ONLY.

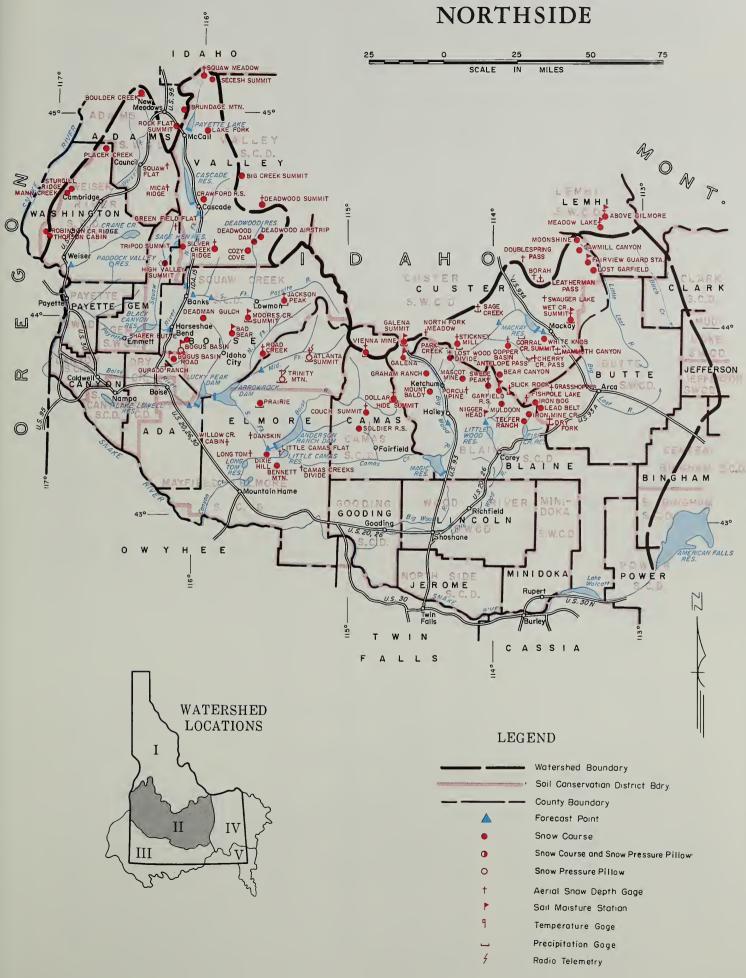
SNOW					<u></u>				
				RRENT INFOR		PAST RECORD			
DRAINAGE BASIN and SNOW			DATE OF	SNOW DEPTH	WATER CONTENT		ENT (Inches)		
NAME	NO.	ELEVATION	SURVEY	(inches)	(inches)	LAST YEAR	AVERAGE 6		
Bogus Basin Road	16F4	5360	2/3	25	9.0	7.1	4.8*		
Couch Summit	14F10	6950	1/26	68	21.8	13.8	10.9*		
<pre>#Dixie Hill</pre>	15F8	5230	1/27	17	5.3				
Moores Creek Summit	15F1	6100	2/1	103	35.3	28.8	20.9		
Prairie	15F6	4900	1/28	27	9.1	6.3	4.7		
#Soldier Rgr. Sta.	14F11	6100	2/1	44	15.0	13.2	8.4*		
Trinity Mountain	15F5	7780	1/29	115	43.4	35.0	26.4%		
PAYETTE RIVER									
#Big Creek Summit	15E2	6600	1/29	106	37.4	31.4	23.2		
Bogus Basin	16F2	6120	2/1	70	26.3	23.0	14.8		
#Brundage Mountain	16D6	75 60	1/28	142	47.8	42.6			
Cozy Cove	15E8	5900	1/28	68	19.0	18.0	10.7		
Crawford Rgr. Sta.	15E3	4800	1/29	34	11.4	7.4	5.6*		
Deadwood Airstrip	15E10	5440	1/28	54	15.5	17.4	10.3*		
Deadwood Dam	15E7	5290	1/28	61	18.4	17.1	11.0		
High Valley Summit	16E4	5170	1/31	43	13.0				
Rock Flat Summit	16E1	5200	1/28	67	21.6	14.9	11.7		
Tripod Summit	16E3	5200	1/29	69	22.2		13.5%		
			-,						
WEISER RIVER									
Boulder Creek	16D1	5500	1/27	94	30.6	21.6	15.9*		
	1001	3300	1/2/	74	50.0	21.0	10.5"		

SOIL MOISTURE		PROFILE	(Inches)	SOIL MOISTURE (Inches)			
STATION NAME	ELEVATION	DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
LITTLE LOST RIVER Fairview Guard Station Wet Creek Summit	5850 8175	42 48	7.6 17.1	12/29 1/28	7.6 ^j 13.2	7.5 12.4	8.5
BIG WOOD RIVER Galena Galena Summit	7300 8795	48 48	10.1	1/27 1/28	7.0 Frozen	4.2 1.7	8.7
BOISE RIVER Bogus Basin Road j January Measurement * Fall Measurement	4830	48	7.1	2/3	5.8	5.8	5.7
* Fall Measurement							

⁽b) 1953-67, 15 year period. *Not located directly on this drainage. *Estimated 1953-67, 15 year Average. (A) Aerial observation: Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.

	MIDDLE	SNAKE	RIVER	BASIN -	SOUTHSIDE		
RAFT RIVER							
Howell Canyon	13G1	8000	1/28	68	25.3	28.5	15.0*
Sublett	12 G 8	6000	1/27	36	12.0	10.4	6.2*
GOOSE CREEK							
Badger Gulch	14G3	6660	1/28	26	9.0	11.8	6.2*
SALMON FALLS CREEK							
#Bear Creek (A) Nev.	15H1	7800	1/28	48	17.6	15.2	11.3*
Cedar Creek (A)	14G5	7000	1/28	24	8.6	8.0	6.5*
Deadline	14G4	6900	1/29	58	20.9	20.8	13.8*
Goat Creek Nev.	15H13	8800	1/30	51	18.4	13.5	10.3*
#Hummingbird Spgs.Nev.		8945	1/30	65	23.6	17.0	11.1*
Magic Mountain	14G2	6700	1/29	44 49	16.9	17.2 15.6	10.8*
#Pole Creek R. S. Nev.	15H14 15H18	8330 7940	1/30 1/28	12	18.0 4.4	8.0	10.8*
Red Point (A) Nev. Shoshone Basin	14G6	5740	1/29	10	3.8		3.1*
Wilson Creek (A)	15G2	7500	1/28	37	13.6	9.0	
BRUNEAU RIVER							
Bear Creek (A) Nev.	15H1	7800	1/28	48	17.6	15.2	11.3*
Hummingbird Spgs. Nev.	15H15	8945	1/30	65	23.6	17.0	11.1*
Pole Creek R. S. Nev.	15H14	8330	1/30	49	18.0	15.6	10.8*
#Seventy-six Cr. Nev.	15H3	7100	1/28	25	9.2	13.9	6.1*
OWYHEE RIVER							
Antelope Ridge	16G6	5900	2/1	19	5.0	6.6	3.4*
Battle Creek (A)	16G9	5700	1/27	0	0.0	2.5	2.8*
#Bear Creek (A) Nev.	15H1	7800	1/28	48	17.6	15.2	11.3*
Bull Basin (A)	16G10	5600	1/27	0	0.0	1.8	0.9*
Hyde Pasture (A)	16G5	5800	1/27	8	3.2	2.8	3.8*
Mud Flat	16G7	5500	2/1	18	5.2	6.2	3.4*
Red Canyon (A)	16G11	6650	1/27	10	4.0	11.4	4.2*
#Seventy-six Cr. Nev.	15H3	7100	1/28	25	9.2	13.9	6.1*
Silver City	16F3	6400	2/1	41	15.1	15.4	9.2*
South Mountain	16G1	6340	1/27	29	11.6	11.4	7.3
Succor Creek (A)	16F6	6100	1/27	6	2.3	3.2	4.4*
Triangle (A)	16G4	5150	1/27 1/27	0	0.0	0.0	0.8*
Vaught Ranch (A) War Eagle (A)	16G12 16G13	5950 7700	1/27	48	17.8	28.5	
Dagie (A)	10015	7700	1/2/	70	17.0	20.5	

MIDDLE SNAKE RIVER BASIN NORTHSIDE



INDEX to SNOW COURSES

NO.	STAT	Ε	NAME	SEC.	TWP.	RGE. I	ELEV.	No. s	TATE	NAME	SEC.	08 _	RGE.	
				LAT.		LONG.					LAT.	AND	LONG.	
	n/ITI	71	DLE SNAKE RI	מיזוזי	DAG	TNT				BOISE RIVER				
	TATTI	נע			DAS	TIA		15F4APS	I	Atlanta Summit	23	5 N	10E	7500
			NORTHSID	Œ				15F2M	I	Bad Bear	35	7 N	6E	5500
								16F4 16F5m	I	Bogus Basin Road Bogus Basin Road	32 36	5N 5N	3E 2E	5360 4830
			LITTLE LOST RIVER					14F10A	Ī	Couch Summit	9	2N	14E	6950
13E5M		Ι	Fairview Guard Station	27	12N	26E	6750	15F10a	I	Danskin	17	1N	7 E	5650
13E3		Ι	Lost-Garfield	3	11N	26 E	6600	16F1	I	Deadman Gulch	29	7N	4E	5600
13E6		I	Moonshine	31 17	13N 12N	26E 26E	7450 6900	15E9AP 15F1MP	I	Jackson Peak Moores Creek Summit	7 19	8N 7N	9E 7E	7000 6100
13E4 13E9a		I I	Sawmill Canyon Swauger Lake	26	12N 9N	24E	9050	15F6P	Ī	Prairie	13	2N	7 E	4900
13E7M		I	Wet Creek Summit	15	8N	25E	7600	15F3A	I	Road Creek	5	5N	8E	5550
								15F5APS 15F11a	I	Trinity Mountain	7 26	3N 1N	9E 6E	7780 4710
			BIG LOST RIVER					131114	1	Willow Creek Cabin	20	IN	OL	4710
13F18 ₁	^	Ι	Antelope Pass	7	5ท	23E	8800			CANYON CREEK				
13F3 13F13		I I	Bear Canyon Cherry Creek Pass	26 7	5N 5N	21E 23E	7920 8900	15F7	I	Bennett Mountain	7	2 S	9E	6650
13F2A		I	Copper Basin	24	6N	21E	7650	15F8	I	Dixie Hill	13	2 S	8E	5230
13F19 ₁		I	Corral Creek Summit	25	7N	22E	8550	15F12a	I	Little Camas Flat	21	18	9E	4950
13F20		Ι	Dry Fork	23	3N	23E	7340	15F13a	I	Long Tom	19	15	8E	4550
13F8a 13F7a		I I	Fishpole Lake Grasshopper	28 15	4N 4N	22E 22E	9350 8400			PAYETTE RIVER				
13F/a 13F11		I	Iron Bog	23	4N	22E	7650			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
13F12		I	Leadbelt	34	4 N	23E	6800	16F2MPS	I	Bogus Basin	16	5N	3 E	6120
14F3A		I	Lost Wood Divide	19	6N	19E	7900	15E8 15E3	I I	Cozy Cove Crawford Ranger Station	19	11N 14N	7E 4E	5900 4800
13F17 14F15		I	Mammoth Canyon North Fork Meadow	14 20	6N 7N	23E 18E	8300 8150	15E10	I	Deadwood Airstrip	8	11N	7E	5440
14F15		I	Park Creek	18	6N	19E	7685	15 E7	I	Deadwood Dam	8	11N	7 E	5290
14E5a		I	Sage Creek	12	9N	20 E	7800	15 E4A	I	Deadwood Summit	23	14N	7 E	7000
13F14		Ι	Slickrock	17	4N	22E	8640	16 E7 a 16 E4	I	Greenfield Flat High Valley Summit	1	13N 10N	2E 2E	7370 5170
14F2A 13F1		I	Stickney Mill White Knob	9 25	6N 7N	19E 23E	7500 7700	15E1	I	Lake Fork	3	18N	4E	6000
		-					,,,,,	16E1	I	Rock Flat Summit	1	18N	2 E	5200
			BIG WOOD RIVER					15D1	I	Secesh Summit	34	22N	4E	6600
15F9a		I	Camas Creeks Divide	11	2 S	9E	5720	16F7 15E5A	I	Shafer Butte Silver Creek Ridge	15 24	5N 12N	3 E 5 E	7480 5700
15F9a 14F8A		I	Dollarhide Summit	16	3N		8620	15D2A	Ī	Squaw Meadow	5	21N	4E	5800
14F1M		Ī	Galena	3	6N	15E	7300	16 E3	I	Tripod Summit	17	11N	3E	5200
14F12		I	Galena Summit	33	7 N		8795			WEISER RIVER				
14F5 14F7		I I	Graham Ranch Mascot Mine	10 8	5N 4N		6200 7900	1						
14F7 14F9		I	Mount Baldy	26	4N		9000	16D1P 16E6a	I	Boulder Creek Mica Ridge	15 15	20N	1W 2E	5500 6800
14F11		I	Soldier Ranger Station	19	2N	14E	6100	16E2	I	Placer Creek	15 & 16	15N 17N	2 E 3 W	6000
			LITTLE WOOD RIVER	₹				16E5a	Ī	Squaw Flat	32	17N	2E	6230
										MANN CREEK				
13F4M		Ι	Garfield Ranger Station		3 N	21E	6554	16E9	I	Mann Creek	29	15N	5 W	5980
13F5 14F13		I	Muldoon Niggerhead	25 26	3N 2N	21E 20E	6300 5450	16 E8	Ī	Sturgill Ridge	28	15 N	5W	6680
14F14		Ī	Porcupine	30	4N	20E	8350	17E1	I	Robinson Creek Ridge	2	14N	6W	6220
13F9A		I	Swede Peak	4	3N	21E	7500	17E2	Ι	Thorson Cabin	12	14N	6W	5320
			FISH CREEK											
13F10)	Ι	Iron Mine Creek	32	3N	23F	6370	1						
13F6		Ī	Telfer Ranch	12	2N	22E								

LEGEND

Numbering System (example)

10J7	SNOW COURSE ONLY.
10J7P	SNOW COURSE AND PRECIPITATION GAGE.
10J7M	SNOW COURSE AND SOIL MOISTURE STATION.
10J7A	SNOW COURSE AND AERIAL MARKER.
10J7s	PRESSURE PILLOW ONLY.
10J7S	SNOW COURSE AND PRESSURE PILLOW.
10J7MA	SNOW COURSE, SOIL MOISTURE STATION AND AERIAL MARKER.
I0J7MP	SNOW COURSE, SOIL MOISTURE STATION AND PRECIPITATION GAGE.
10J7m	SOIL MOISTURE STATION ONLY
10J7a	AERIAL MARKER ONLY.
1017p	STORAGE PRECIPITATION GAGE ONLY.

SOIL MOISTURE		PROFILE	(Inches)		SOIL MOISTU	RE (Inches)	
STATION NAME	ELEVATION	DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
RAFT RIVER	CCCVATION						
Conner Pass Howell Canyon Sublett	5700 8000 6000	36 48 36	9.8 11.5 7.0	1/29 1/28 1/27	8.1 9.2 6.1	9.0 7.3 5.7	8.3 7.2 7.3
GOOSE CREEK							
Badger Gulch	6660	36	7.0	1/28	6.9	6.0	5.8
SALMON FALLS CREEK							
Deadline Patrick Ranch Pole Creek R. S.	6900 5720 8330	36 36 48	7.4 7.7 9.7	1/29 1/30 1/30	7.3 6.8 6.9	6.2 6.7 5.2	7.2 6.9 6.2
OWYHEE RIVER							
Mud Flat	5500	48	12.8	2/1	14.0	14.4	10.8
* Fall Measurement							
		10.1					
						-	
	1.1						
	1						
	- 1					1 -	

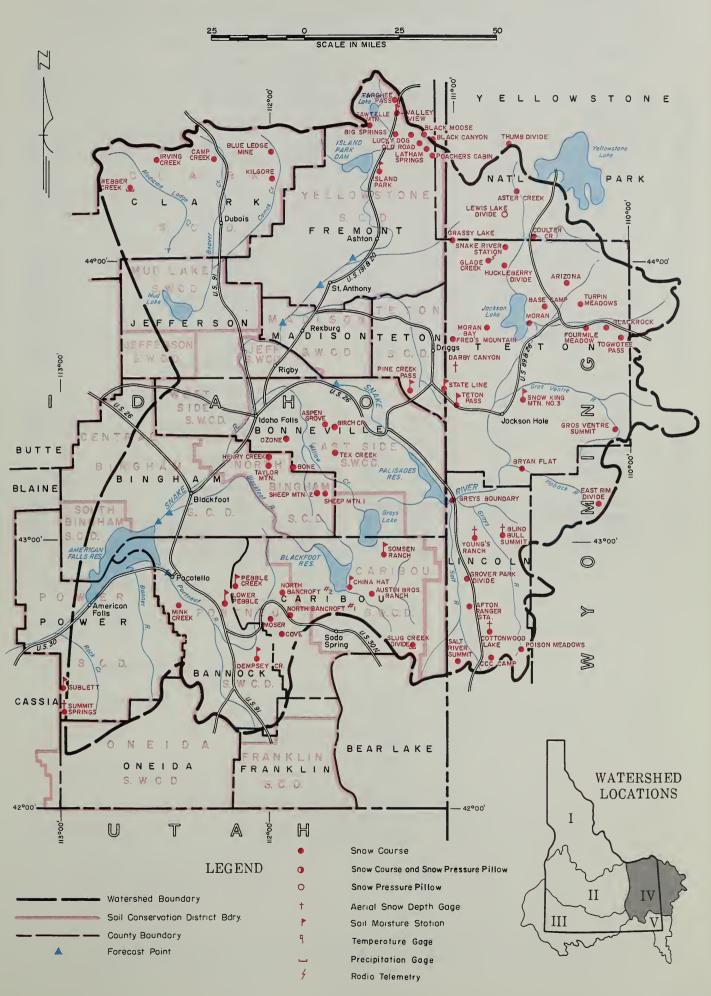
PAST RECORD WATER CONTENT Coopes WATER CONTENT (inches) DRAINAGE BASIN and SNOW COURSE SNOW DEPTH DATE OF AVERAGE b LAST YEAR NAME ELEVATION SURVEY (Inches) NO.

UPPER SNAKE RIVER BASIN

CAMAS-BEAVER CREEKS							
Camp Creek Kilgore	12E3 11E12	6800 6200	1/27 1/28	43 43	12.9 14.2	6.2 9.8	6.3 6.2
MEDICINE LODGE CREEK							
Irving Creek Webber Creek	12 E4 12 E5	7035 6700	1/28 1/28	29 28	7.0 6.9	3.6 3.0	3.5* 3.2*
HENRYS FORK RIVER							
Big Springs Black Canyon Black Moose Grassy Lake Wyo. Island Park Latham Springs Lucky Dog Old Road Poacher's Cabin Sawtelle Mountain Targhee Pass Valley View	11E9 11E18 11E19 10E15 11E10 11E16 11E14 11E15 11E17 11E32 11E34 11E8	6500 7850 8125 7230 6315 7650 6900 7250 8000 8715 7000 6500	1/28 1/28 1/28 1/28 1/28 1/28 1/28 1/28	68 95 110 98 60 95 78 86 83 100 53	22.3 32.0 40.8 34.7 18.2 34.4 27.6 30.4 28.4 36.0 16.3 17.9	16.3 22.8 27.8 27.4 12.6 23.2 19.4 21.6 23.2 23.8 8.2 8.6	13.1 23.1* 26.8* 21.9 10.6 22.4* 16.8* 17.5* 23.8*
TETON RIVER							
Freds Mountain Pine Creek Pass State Line WILLOW CREEK	10F22 11F2 11F1	8000 6750 6400	1/29 1/28 1/28	67 45 41	23.2 14.0 12.3	22.1 16.9 11.7	10.5* 9.0
Aspen Grove Birch Creek Bone Ozone Sheep Mountain II Tex Creek	11F10 11F3 11F8 11F4 11F11 11F5	6600 6800 6200 5800 6510 6700	1/29 1/29 1/28 1/27 1/28 1/29	34 28 24 0 44 29	10.5 8.1 7.5 0.0 13.1 8.0	9.8 7.4 6.5 T 10.9 5.8	
SAND CREEK							
Henry Creek Taylor Mountain	11F6 11F7	5650 6500	1/27 1/27	11 25	4.2 7.2	2.2 9.4	

⁽b) 1953-67, 15 year period. * Not located directly on this drainage. * Estimated 1953-67, 15 year Average. (A) Aerial observation: Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.

UPPER SNAKE RIVER BASIN



INDEX to SNOW COURSES

NU.	STATE NAME	SEC.		RGE.	ELEV.	NO. S	TATE	NAME		P. RGE		ELEV.
		LAT.	— OR	LONG.						D LON	iG.	
					1							
				~~~				TETON RIVER				
Ţ	IPPER SNAKE I	RIVER	BA	ASIN		1077210	V.X			/ 2×1	11011	8250
_						10F21a 10F22	Wy Wv	Darby Canyon Freds Mountain	28 12	43N 44N	118W 118W	8000
	SNAKE RIVER - WY	OMING				11F2M	wy I	Pine Creek Pass	24	3N	44E	6750
	16			110**		11F1M	ī	State Line	32	3N	46E	6400
10G4 Wy		30		118W	6200	10F13M	Wy	Teton Pass	24	41N	118W	8500
10F1 Wy		3 44° 17'	46N	115W 110° 38'	6850	10113.1	,	recon rass	24	7111	110#	0,500
10E8 Wy		20	46 N	110 38	7700 6900							
10F2 Wy 10F7 Wy		4	46 N	111W	8600			CAMAS - BEAVER	CREEK			
10F7 wy		6	34N	115W	8750	11E11	I	Blue Ledge Mine	27	13N	38E	6700
10G2A Wy		9	38N	115W	6250	12E3	I	Camp Creek	21	13N	36E	6800
10G7 Wy	•	9	29N	118W	7500	11E12	I	Kilgore	6	12N	39E	6200
10G5A Wy		25	31N	118W	7500							
10E10 Wy		44° 09'	3 - 1.1	110° 33'				MEDICINE LODGE	CREEK			
10F17MP Wy		32	37N	111W	7950	1077/	_			13N	33E	7035
10F6 Wy		35	45N	112W	7770	12E4 12E5	I	Irving Creek Webber Creek	20 23	12N	32E	6700
10E13 Wy		12	48N	116W	7200	1265	1	webber Creek	23	1214	32E	0700
10F18 Wy		33	37N	118W	5800							
10F19 Wy	Gros Ventre Summit	36	40N	111W	8750			WILLOW CREEK				
10G3 Wy	Grover Park Divide	27	33N	118W	7500	11F10	I	Aspen Grove	35	2 N	41E	6600
10E14 Wy	Huckleberry Divide	32	48N	115W	7300	11F3	I	Birch Creek	36	2 N	41E	6800
10E9PS Wy	Lewis Lake Divide	44° 13'		110° 40'	7900	11F8	I	Bone	29	18	40 E	6200
10F4MP Wy	Moran	8 & 17		114W	6800	11F4	I	Ozone	14	1N	39E	5800
10F3 Wy		14	45N	116W	6800	11F9	I	Sheep Mountain I	33	2 S	41E	6450
10G6 Wy		29		116W	8500	11F11	I	Sheep Mountain II	33	2 S	41E	6510
10G8P Wy		32	29N	118W	7900	11F5	I	Tex Creek	6	18	42E	6700
10E12MP Wy		9		115W	6780							
10F20M Wy		4	40 N	117W	7600			SAND CREEK				
10E7 Wy		44° 221		110° 35'		11F6	I	Henry Creek	7	18	39E	5650
10F9MP Wy	0	29		110W	9600	11F7	ī	Taylor Mountain	19	1S	39E	6500
10F5 Wy		14	45N	112W	6930	1117	-	layici modiicalii	19	13	375	0,500
10G1A Wy	Young's Ranch	26	34N	116W	6530			DI ACKEGOT DIVER				
								BLACKFOOT RIVER				
	HENRYS FORK RIVE	R				11G3	I	Austin Brothers Ranch	28	7 S	43E	6450
11E9 I	Big Springs	34	14N	44E	6500	11G2M	I	China Hat	17	7S	42E	6300
11E18 I	Black Canyon	11	13N	45E	7850	11G5P	I	Slug Creek Divide	15	10 S	44E	7225
11E19 I	Black Moose	33	14N	45E	8125	11G1M	I	Somsen Ranch	25	5S	43E	7000
10E15 Wv	Grassy Lake	6	48N	117W	7230							
11E10M I	Island Park	29	13N	43E	6315			PORTNEUF RIVER				
11E16 I	Latham Springs	9	13N	45E	7650	11G25	4	Cove	21	9 <b>s</b>	39E	5525
11E14 I	Lucky Dog	2	13N	45E	6900	11G25 12G5	Ī	Dempsey Creek	17	10S	38E	6280
11E15 I	Old Road	12	13N	44E	7250	12G6M	Ī	Lower Pebble	7	88	38E	5800
11E17 I	Poacher's Cabin	11	13N	45E	8000	12G1	ī	Mink Creek	33	7S	34E	6300
11E32 I	Sawtelle Mountain	7	14N	43E	8715	11G24	Ī	Moser	20	85	39E	5950
11E34 I	Targhee Pass	32	16N	44E	7000	11G23	ī	North Bancroft #1	15	88	39E	5460
11E8M I	Valley View	7	15N	44F	6500	11G23	Ī	North Bancroft #2	27	7S	39E	5430
						12G2M	ī	Pebble Creek	34	7S	37E	6550
					1							

### LEGEND

### Numbering System (example)

10J7	SNOW COURSE ONLY.
10J7P	SNOW COURSE AND PRECIPITATION GAGE.
10J7M	SNOW COURSE AND SOIL MOISTURE STATION.
1 <b>0</b> J7A	SNOW COURSE AND AERIAL MARKER.
10J7s	PRESSURE PILLOW ONLY.
10 <b>J</b> 7S	SNOW COURSE AND PRESSURE PILLOW.
10J7MA	SNOW COURSE, SOIL MOISTURE STATION AND AERIAL MARKER.
10J7MP	SNOW COURSE, SOIL MOISTURE STATION AND PRECIPITATION GAGE.
10j7m	SOIL MOISTURE STATION ONLY.
10J7a	AERIAL MARKER ONLY.
10J7p	STORAGE PRECIPITATION GAGE ONLY.

		CU	RRENT INFOR	MATION	PAST R	ECORD
V COURSE		DATE OF	SNOW DEPTH	WATER	WATER CONT	TENT (Inches)
NO.	ELEVATION	SURVEY	(inches)	(inches)	LAST YEAR	AVERAGE 6
11G3	6450	2/1	28	8.8	6.6	5.1*
11G2	6300	2/1	19	6.0	5.2	4.2*
11G5	7225	1/29	52	17.0	12.4	9.9*
11G1	7000	2/1	45	14.3		7.5*
11G25	5525	1/28	20	6.2	1.9	
12G5	6280	1/27	42	11.6	9.0	6.5*
12 <b>G</b> 6	5800	1/28	44	13.0	8.8	
12G1	6300	1/27				8.9*
11G24	5950					
11G23	5460					
						8.6*
	11G3 11G2 11G5 11G1 11G25 12G5 12G6 12G1 11G24	11G3 6450 11G2 6300 11G5 7225 11G1 7000 11G25 5525 12G5 6280 12G6 5800 12G1 6300 11G24 5950 11G23 5460 11G22 5430	COURSE	DATE OF SURVEY   SNOW DEPTH (inches)	Date of Survey   Show Depth (unches)   WATER CONTENT (unches)   CONTENT (unches)	DATE OF SNOW DEPTH (Inches)   WATER CONTENT (Inches)   WATER CONTENT (Inches)   LAST YEAR

SOIL MOISTURE		PROFILE	(Inches)		SOIL MOISTU	RE (Inches)	
STATION NAME	ELEVATION	DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
HENRYS FORK RIVER							
Island Park Valley View	6315 6500	48 48	9.9	1/28 1/28	8.3 Frozen	7.6 Frozer	9.2
TETON RIVER							
Pine Creek Pass State Line Teton Pass	6750 6400 8500	48 48 48	13.3 14.8 10.5	1/28 1/28 1/28	11.8 14.0 11.8	11.3 11.2 7.1	13.2 ^j 13.0 ^j 8.1 ^j
PORTNEUF RIVER							
Lower Dempsey Lower Pebble Pebble Creek	5210 5800 6550	48 36 48	18.7 7.6 7.2	1/27 1/28 1/28	18.2 8.5 5.5	17.4 4.6 4.0	18.8 8.5 6.4
j January Measurement							

⁽b) 1953-67, 15 year period. *Not located directly on this drainage. *Estimated 1953-67, 15 year Average. (A) Aerial observation: Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.

CURRENT INFORMATION PAST RECORD

DRAINAGE BASIN and SNOW COURSE

DATE OF SNOW DEPTH CONTENT (Inches)

NAME

NO. ELEVATION SURVEY

DATE OF SURVEY

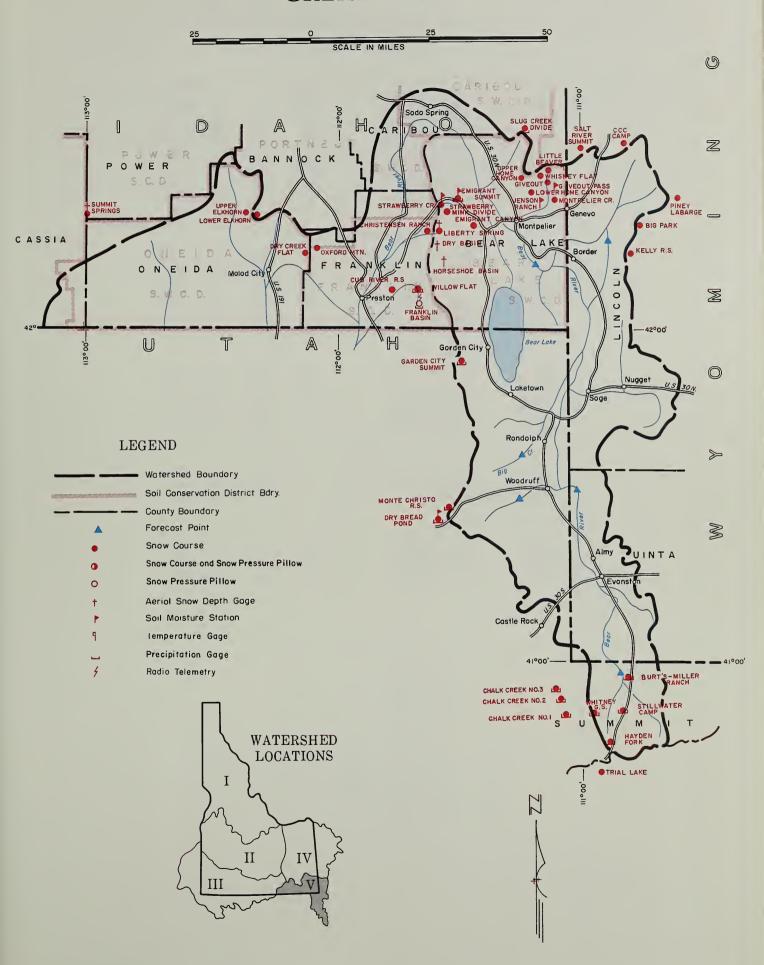
(Inches)

LAST YEAR AVERAGE B

### GREAT BASIN

BEAR RIVER							
Emigrant Summit Emigration Canyon	11G6 11G7	7350 6500	1/29 1/29	79 38	27.4 12.6	19.4 9.5	14.2* 6.4*
Montpelier Creek							
Giveout Little Beaver Lower Home Canyon Montpelier Creek Upper Home Canyon Whiskey Flat	11G16 11G20 11G27 11G18 11G26 11G21	6840 6970 7500 6570 8500 6985	1/27 1/27 1/28 1/27 1/28 1/27	44 50 51 30 80 38	14.4 16.4 16.5 9.1 27.3 11.8	9.3 11.0 11.3 5.8 18.6 6.0	7.7* 9.8*  5.3*  6.2*
Mink Creek							
Christensen Ranch Dry Basin (A) #Emigrant Summit Horseshoe Basin (A) Liberty Spring (A) Strawberry Creek Strawberry Mink Divide	11G11 11G14 11G6 11G15 11G13 11G9 11G10	5600 7900 7350 8000 8600 5800 6800	1/27 1/30 1/29 1/30 1/30 1/27 1/27	35 94 79 85 131 40 71	9.6 32.6 27.4 29.5 45.5 11.1 23.5	5.1 22.3 19.4 16.0 25.2 6.1 15.8	5.6*  14.2*  6.9* 13.0*
Cub River							
Cub River R. S. Willow Flat	11G12 11G4	5400 6100	1/28 1/28	34 53	9.0 16.9	6.4 9.7	5.7* 9.4*
MALAD RIVER							
Dry Creek Flat Daniels Creek Lower Elkhorn Oxford Mountain Cliff Canyon Upper Elkhorn	12G4 12G12 12G11 12G3 12G13 12G10	6350 6400 6850 6800 7200 7100	1/25 1/26 1/25 1/25 1/26 1/25	31 23 42 34 29 57	10.0 5.9 13.8 10.1 9.1 18.9	6.0 2.6 12.1 9.0 4.3 16.0	4.5*  5.6* 

### GREAT BASIN



### INDEX to SNOW COURSES

NO. STATE

NAME

SEC. TWP. RGE. ELEV.

### GREAT BASIN

### BEAR RIVER

10G11	Wy	Big Park	7	27N	117W	8700
11H13MP	U	Dry Bread Pond	19	8 N	4E	8230
11G7	I	Emigration Canyon (mouth)	24	12S	42E	6500
11H7P	U	Garden City Summit	35	14N	4E	7600
10J6P	U	Burt's-Miller Ranch	19	3N	10E	7900
10J7P	U	Hayden Fork	1	18	9E	9300
10G12	Wy	Kelly Ranger Station	13	26 N	118W	8200
11H12P	บ้	Monte Cristo R. S.	3	8 N	4E	8960
10G10	Wy	Piney LaBarge	19	29N	114W	8820
10J17P	บ้	Stillwater Camp	32	2 N	10E	8550
10J28P	Ū	Whitney G. S.	4	1N	9E	9300
		WONTER LED OREEK				
		MONTPELIER CREEK				
11G16	I	Giveout	35	118	45E	6840
11G17m	I	Giveout Pass	2	12 S	45E	7025
11G19m	I	Jenson Ranch	15	12S	45E	6580
11G20	I	Little Beaver	26	11 <u>S</u>	45E	6970
11G 27	I	Lower Home Canyon	17	12S	45E	7 500
11G18	I	Montpelier Creek	22	12S	45E	6570
11G26	I	Upper Home Canyon	31	118	45E	850C
11G21	I	Whiskey Flat	26	118	45E	6985
		MINK CREEK				
11G11	I	Christensen Ranch	27	138	41E	5600
11G14a	I	Dry Basin	30	138	42E	7900
11G6MP	I	Emigrant Summit	21	12S	42 E	7350
11G15a	Ι	Horseshoe Basin	31	138	42E	8000
11G13A	I	Liberty Spring	7	138	42E	8600
11G9M	I	Strawberry Creek	9	13S	41E	5800
11G10	I	Strawberry Mink Divide	14	138	41E	6800
		CUB RIVER				
11G12	I	Cub River Ranger Station	5	158	41E	5400
11G8S	I	Franklin Basin	1	16 S	41E	8000
11G4P	I	Willow Flat	2	158	41E	6100
		MALAD RIVER				
12G4	I	Dry Creek Flat	31	138	37E	6350
12G11	I	Lower Elkhorn	30	12S	36E	6850
12G3	I	Oxford Mountain	32	138	37E	6800
12G10	I	Upper Elkhorn	25	128	35 E	7100

### LEGEND

### Numbering System (example)

10J7	SNOW COURSE ONLY.	
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10 <b>J</b> 7A	SNOW COURSE AND AERIAL MARKER.	
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10J7S	SNOW COURSE AND PRESSURE PILLOW.	
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10J7MP	SNOW COURSE, SOIL MOISTURE STATION AND PRECI	PITATION GAGE
10 <b>J</b> 7m	SOIL MOISTURE STATION ONLY	
10J7a	AERIAL MARKER ONLY.	
10J7p	STORAGE PRECIPITATION GAGE ONLY.	

SOIL MOISTURE	PROFILE (Inches) SOIL MOISTURE (Inches)						
STATION NAME	ELEVATION	DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
NAME	ELEVATION						
BEAR RIVER			•				
Emigrant Summit	7350	36	8.2	1/29	6.6	6.1	4.1 ^j
Strawberry Creek	5800	48	12.7	1/29	10.1	8.3	12.4
Montpolior Crook							
Montpelier Creek							
Giveout Pass	7025	36	9.4	1/27	7.3	4.2	4.0 ^j
Jenson Ranch	6580	48	18.7	1/27	7.0	10.0	8.2
j January Measurement							
						:	



# Agencies and Organizations Cooperating in Idaho Snow Surveys

### GOVERNMENT AGENCIES

Canada:

Department of Lands, Forests, and
Water Resources, British Columbia
Department of Resources and Development,
Water Resources Division

### States:

Idaho State Department of Water Administration
State of Idaho Department of Fish and Game
University of Idaho
Idaho State University
Montana Agricultural Experiment Station
Montana State Water Conservation Board
Nevada Cooperative Snow Surveys
Oregon Agricultural Experiment Station
Oregon Cooperative Snow Surveys
Oregon State Engineer and Corps of
State Watermasters
Utah Cooperative Snow Surveys
Wyoming Cooperative Snow Surveys

### Federal:

- U. S. Army Engineers
- U. S. Department of Agriculture
  Forest Service
  Agricultural Research Service
- U. S. Department of Commerce
  Environmental Sciences Service Administration,
  Weather Bureau
- U. S. Department of the Interior
  Bonneville Power Administration
  Bureau of Reclamation
  Fish and Wildlife Service
  Water Resources Division, Geological Survey
  Indian Service
  National Park Service
  Bureau of Land Management

### PUBLIC UTILITIES

The Montana Power Company Washington Water Power Company Idaho Power Company Utah Power and Light Company

### ORGANIZED PUBLIC AGENCIES

Big Lost River Irrigation District
Boise Project Board of Control
Little Wood River Irrigation District
Jordan Valley Irrigation District
Salmon Falls Creek Irrigation Company
Twin Falls Soil Conservation District
Twin Lakes Irrigation Company
Big Wood Irrigation Company
Owyhee Project - North & South Board of Control

### PRIVATE CORPORATIONS

Amalgamated Sugar Company

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# COOPERATIVE SNOW SURVEYS

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